



# **Aviation Investigation Final Report**

**Location:** Rutherfordton, North Carolina **Accident Number:** ERA14CA104

Date & Time: January 26, 2014, 13:45 Local Registration: N6762U

Aircraft: Mooney M20C Aircraft Damage: Substantial

**Defining Event:** Fuel exhaustion **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

According to the pilot, he checked the fuel gauges in the airplane before departing on a cross country flight. He stated that the left fuel gauge indicated 1/2 tank and the right fuel gauge indicated 1/4 tank. The pilot did not visually check the fuel quantity in the tanks and did not take on any additional fuel. Approximately 60 nautical miles (NM) from his destination, he switched from the left fuel tank to the right fuel tank. The engine began to "stutter" and he switched back to the left fuel tank and the engine resumed normal operation. He located the nearest airport which was 10 NM from his location and made a turn towards it. Shortly thereafter, the engine began to "stutter" again and the pilot shut the engine down and made an emergency landing in a field. During the emergency landing, the airplane collided with trees, and sustained substantial damage to the wings and fuselage. Examination of the fuel system revealed that the fuel tanks were not breached, and the left and right fuel tanks contained less than 1 gallon of fuel in each. A review of the pilot operating handbook (POH) revealed that each fuel tank held 26 gallons of fuel, for a total of 52 gallons. The POH stated that there is 48 gallons of usable fuel, which left 4 gallons of fuel unusable. The POH also revealed that the fuel tanks should be visually checked before flight.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's inadequate pre-flight planning and in-flight monitoring of the fuel level which resulted in a total loss of engine power due to fuel exhaustion.

## **Findings**

Personnel issues Fuel planning - Pilot

Aircraft Fuel - Fluid management

Aircraft Fuel - Fluid level

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# **Factual Information**

## History of Flight

Enroute-cruise	Fuel exhaustion (Defining event)	
Emergency descent	Off-field or emergency landing	
Emergency descent	Collision with terr/obj (non-CFIT)	

## **Pilot Information**

Certificate:	Private	Age:	47
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	May 26, 2005
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 25, 2005
Flight Time:	480 hours (Total, all aircraft), 210 hours (Total, this make and model), 450 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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#### **Aircraft and Owner/Operator Information**

Aircraft Make:	Mooney	Registration:	N6762U
Model/Series:	M20C NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	1963	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2484
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	December 20, 2012 Annual	Certified Max Gross Wt.:	2575 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2091 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A1D
Registered Owner:	GOELLER S DEREK	Rated Power:	180 Horsepower
Operator:	GOELLER S DEREK	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HKY,1190 ft msl	Distance from Accident Site:	37 Nautical Miles
Observation Time:	13:00 Local	Direction from Accident Site:	55°
<b>Lowest Cloud Condition:</b>	Clear / 10000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None / 12000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 20 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	28.89 inches Hg	Temperature/Dew Point:	7°C / -4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Atlanta, GA (FTY )	Type of Flight Plan Filed:	None
Destination:	Hickory, NC (HKY)	Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	

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## **Airport Information**

Airport:	Rutherford County Airport-Marc FQD	Runway Surface Type:	
Airport Elevation:	1077 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

# Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	35.359554,-81.960464(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Alleyne, Eric

Additional Participating
Persons:

Original Publish Date: April 23, 2014

Last Revision Date:

Investigation Class: Class

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=88715

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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